

creature that may be born ready to receive it, and that when it has gone the round of all created forms in land, in water, and in air, it once more re-enters a human body born for it; and this cycle of existence takes place in 3,000 years.' Metempsychosis is one of the best-authenticated parts of the teaching of Pythagoras, with whose name it has continued to be specially associated. Plato does not exactly teach the doctrine dogmatically, but avails himself of it in the mythical presentations of his thought. By him it is connected with a law of moral retribution. The details vary, and it is difficult to say how far any of them are taken seriously by Plato (cf. *Phaedrus*, 249; *Republic*, x. 614 f.). In the myths of the *Gorgias* and the *Phaedo* the doctrine does not appear. (A.S.P.P.)

Besides its prominence in Orphic, Pythagorean, and Egyptian teaching, metempsychosis is a tenet of Indian, Jewish (Cabbala), and Swedenborgian philosophy. It is interesting to note a tendency in current discussion of the immortality of the soul to recur to the hypothesis of pre-existence, as following from the arguments which are urged in support of post-mortem personal existence. The poetry of Plato's doctrine of 'reminiscence' (*ἀνάμνησις*) reappears also, as in Wordsworth's *Intimations of Immortality*. Yet it is difficult to call that a future life in any vital sense which is thought of as being disconnected with this life, as this is, with a possible earlier life.

Literature: see IMMORTALITY, and ORIENTAL PHILOSOPHY. (J.M.B.)

-meter (apparatus ending in): see LABORATORY AND APPARATUS, III, F.

Method [Lat. *methodus*; Gr. *μέθοδος*, from *μερά* + *ὁδός*, way]: Ger. *Methode*; Fr. *méthode*; Ital. *metodo*. See the topics immediately following; also PSYCHOLOGICAL METHODS, and SCIENTIFIC METHOD.

Method and Methodology, or Methodic: Ger. *Methodenlehre*; Fr. *methodologie*, *théorie de la méthode*; Ital. *teoria dei metodi*, *metodologia*. A branch of logic which teaches the general principles which ought to guide an inquiry.

Owing to general causes, logic always must be far behind the practice of leading minds. Moreover, for the last three centuries thought has been conducted in laboratories, in the field, or otherwise in the face of the facts, while chairs of logic have been filled by men who breathe the atmosphere of the seminary. The consequence is that we can appeal to few works as showing what methodology ought to be. The first book of Bacon's *Novum*

*Organum* is well enough, as far as it goes, and was no doubt useful in its day. Senebier's *L'Art d'observer* is instructive. Comte's *Philosophie positive* accomplished something. Whewell's *History of the Inductive Sciences* and other works have the advantage of being written by a man of great power of investigation, himself, who drew his doctrine from the facts of scientific history. Mill's *System of Logic* is, no doubt, of considerable value, although the author knew too little of science. There is hardly one of the illustrations of fine method adduced in his first edition which has not been refuted. Beneke's *Logik in praktischer Absicht* was not altogether without value. Of great value, also, is Jevons' *Principles of Science*. Pearson's *Grammar of Science* is a work of great force, but unfortunately too much influenced by certain philosophical ideas. Wundt devotes two of the three volumes of his *Logik* to *Methodenlehre*.

The traditional doctrine of method is confined chiefly to rules of definition and division, which teach an exactness of thought much needed, but are marked by the total absence of modern ideas. Cf. SCIENTIFIC METHOD, and EVIDENCE. (C.S.P.)

Method (in education). An orderly procedure in teaching; a systematic way of teaching and training.

Methods of teaching depend, in a last analysis, upon the acts of mind involved in sense experience and thought. First impressions are prone to inadequacy and even incorrectness. They must be reinforced by drafts upon the stored-up experience of the mind—anticipations of what we may look for in the complete identification of the object. After objects are fully identified, we seek to find their universal properties. In thus making the complete survey of an object of knowledge three steps are involved: (a) preliminary apperception or identification; (b) reinforcement of present by past experience; (c) advance to generalization. In acquisition, therefore, three things are involved: namely, apperceptive identification, deductions of anticipations for further identification, generalization by inductive processes. These are the essential steps of an adequate method. They may be recognized in the terms observation, deduction, induction. When the emphasis is laid on the first, we have the so-called method of observation; when on the second, that of deduction; when on the third, that of induction.

The variety and combination possible in

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